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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,371	09/18/2003	Hee Kyung Lee	51876P389	8435

8791 7590 07/15/2009  
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EXAMINER
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LUONG, ALAN H

ART UNIT	PAPER NUMBER
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2427

MAIL DATE	DELIVERY MODE
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07/15/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/666,371

**Applicant(s)**

LEE ET AL.

**Examiner**

ALAN LUONG

**Art Unit**

2427

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 11, 2009, has been entered.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-3, 6-7, 10-12, 15-16 and 25-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No.7,055,167 issued to Masters (hereinafter Master); in view of WO 00/40021 to Edwin Montie et al. (hereinafter Montie);

**Regarding to claim 1:** Fig. 3 of Master illustrates a system [1] support "a personal channel service providing method for outputting a television (TV) program

preferred by a user, which is referred to as a preferred program, through a personal channel of a personal digital recorder (PDR) [4] beginning at a time preferred by the user, which is referred to as a preferred duration, the method comprising the steps of:

(a) a PVR [4] **“receives content description data”** at connection (14a of Fig. 3) **of a program to be broadcasted”** from broadcast source [2] as **“a TV network “and responses “instance description data”** at connection (14b of Fig. 3) of a program to the broadcast source [2]. (see Master, Fig. 1, 3 col. 2, line 53 to col. 3, line 13 and col. 6 lines 9-23).

(b) Fig. 4 of Master illustrates the viewing menu 40 on display [6] that **“determines the preferred duration and the preferred program in the preferred duration”** into submenu [44]” **based on usage history of the PDR”** [4] (see Master, Fig. 4, col. 7 line 44 to col. 8 line 30) and Fig. 2 of Master shows the procedure selectively updates the viewing menu 40 upon viewer input on the predetermined day of the week to provide for a history of broadcast programs the viewer actually selected on the predetermined day of the week that meets **“updating the instance description data to include the preferred duration and the preferred program”**(see Master, steps 210-214 of Fig. 2 col. 5 lines 12-26). However, Master reference is silent with **“generating an electronic program guide for informing the user that the preferred program is outputted on a personal channel at the preferred duration based on the updated instance description data”**

In an analogous art directed toward a similar problem namely improving the results from generating an electronic program guide. Fig. 1 of Montie illustrates a receiver apparatus includes EPG module [14] generates an on-screen overview programs stored in the memory [11] can be accessed by a virtual channel module [15] for creating a personal channel (i.e. the virtual channel) based on a personal program schedule that is composed by the schedule module [16] that meets “generating an electronic program guide for informing the user that the preferred program is outputted on a personal channel at the preferred duration based on the updated instance description data” (see Montie, page 4, line 10-page 6 line 18). Montie also teaches *wherein the personal channel is for providing the preferred program (i.e. retrieving stored program from storage means) listed in the EPG to the user (user can view scheduled programs in EPG by simply selecting the virtual channel);* (Montie; page 3 lines 22-33). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the PDR with personal channel service of Master including EPG module as taught by Montie to generate EPG information for supporting channel information.

**Regarding to claim 2.** Masters disclose the method as recited in claim 1; also discloses wherein the step b) includes the steps of:

e) selecting the preferred duration, such as day and time(TUESDAY, 10PM), genre preferred in the preferred duration, which is referred to as a preferred genre (CH7 FRASIER) and a predetermined number of preferred program titles (CH 11 NEWS) based on the usage history of the PDR (as discussion in claim 1-b), and

generating user preference data (view menu 40) to include the preferred duration (Submenu 42: Day/Segment), the preferred genre (submenu 44: category name or genre), and the preferred program titles (submenu 44:channel 2 news); (**Master, see Fig.4 col. 7 line 44 to col. 8 line 49**)

f) if the preferred duration is for watching a program stored in the PDR (**col. 8, lines 31-38** ), extracting group information of a program title that belong to the preferred genre among the preferred program titles based on the content description data (**Master, col. 8, lines 50-58 and Fig.4**); and

g) determining a program following a most recently watched program among the programs that belong to the group as the preferred program in the preferred duration; **see Master, col. 8 line 50 to col. 9 line 13**)

Regarding to **claim 3**: Masters discloses the method as recited in claim 2, wherein the preferred duration, such as day and time, is selected based on total duration of programs outputted by the PDR in particular time duration. (Limitation of claim 1 of **Master, col. 9 lines 15-32**).

Regarding to **claim 6**: Masters discloses the method as recited in claim 1; further discloses wherein the step b) includes the steps of:

h) selecting the preferred duration, such as day and time, preferred genre in the preferred duration, and a predetermined number of preferred program titles based on the usage history of the PDR (see claim 1 discussion), and generating user

preference data to include the preferred duration, the preferred genre, and the preferred program titles;(same ground rejection of claim 2-e)

i) if the preferred duration is for watching a program broadcasted in real-time (**Master , col. 8 lines 38-49**), extracting a list of real-time broadcasting programs from the instance description data (**Col. 8 lines 50-58** ); and

j) determining a program that belongs to the preferred genre among the programs on the list as the preferred program in the preferred duration. (Same ground rejection of claim 2-g).

Regarding to **claim 7**: same claim 3 ground rejection.

Regarding to **claim 10**: Master discloses a personal channel service providing apparatus (PDR 4 of Fig. 1, 3; **col. 2 lines 30- 46**) for outputting a TV program preferred by a user, which is referred to as a preferred program, through a personal channel beginning at a time preferred by the user, which is referred to as a preferred duration, the apparatus [4] comprises: “ a memory portion” management module [8] is implemented in connection with a central processor “for storing a control program” to control PVR [4]; (see Master, **Figs.1, 3; col. 6 lines 44-61**), “a database” storage[10] “stores instance description data , usage history of the personal channel service providing apparatus”; (**col. 6 line 62 to col.7 line 17**) and “ a display portion” [6] is connected with display generator [18] inside PDR[4] by [12] “for outputting an EPG” information [26] from management module [8]; (**Master, Fig. 3, col. 5 lines 28-61**). However, Master reference is silent with “a processing portion for updating the instance

description data based on the user preference data and generating an EPG which informs the user that the preferred program is outputted through the personal channel at the preferred duration based on the updated instance description data, the processing portion being connected to the memory portion, the database, and the display portion"

In an analogous art directed toward a similar problem namely improving the results from the apparatus includes a processing portion is connected to the memory portion, the database, and the display portion for updating the instance description data.

Fig. 1 of Montie illustrates **"a processing portion"** includes a [CPU 5] being connected to the memory portion [ROM 12], the database [11] and the display portion [8 and 9] **(see Montie, page 4, line 10-page 5 line 14)**; and the processing portion also includes the schedule module [16] composes a personal program schedule for a virtual channel comprising recorded programs and/or broadcast program meets **"for updating the instance description data based on the user preference data"** (see Montie, page 5, line 26-page 6 line 18) and the EPG module [14] is **"generating an EPG which informs the user that the preferred program is outputted through the personal channel [virtual channel] at the preferred duration"** is scheduled by [16]" **based on the updated instance description data"** (see Montie, page 5, lines 15-25 ). Further, Montie teaches *wherein the personal channel is for providing the preferred program listed in the EPG to the user; reads on (page 3 lines 23-33)*. At the time of the invention, it would have been obvious to one with ordinary skill in the art to modify the PDR for personal channel service of Master with a processing portion as taught by Montie; for updating and generating EPG which informs the user that the preferred



program is outputted through the personal channel at the preferred duration based on the updated instance description data.

Regarding to **claim 11**: same claim 2 ground rejection.

Regarding to **claim 12**: same claim 3 ground rejection.

Regarding to **claim 15**: same claim 6 ground rejection.

Regarding to **claim 16**: same claim 3 ground rejection.

**Regarding to claim 25.** Fig. 1 of Masters illustrates a personal channel service providing apparatus (i.e. PDR 4 of Fig. 1, 3; **col. 2 lines 30- 46**) comprising:

**a collecting unit [8] of PVR [4] “receives content description data” at connection (14a of Fig. 3) of a program to be broadcasted” from broadcast source [2] as “a TV network “and responses “instance description data” at connection (14b of Fig. 3) of a program to the broadcast source [2]. (see Master, Fig. 1, 3 col. 2, line 53 to col. 3, line 13 and col. 6 lines 9-23).**

**determining a broadcasting program (col. 2 lines 58-67) which is included information for creating a personal channel based on user preference data, the content description data (i.e. recorded program is transmitted from service provider [2] of Fig. 3), and instance description data (i.e. the current watching program at user's EPG [26] of Fig. 3) (see Fig. 3, col. 5 line28 to col. 7 line 43; Fig. 4 col. 7 line 53 to col. 8 line 19); updating the instance description data to include information of the**

determined broadcasting program (**see Master, steps 210-214 of Fig. 2 col. 5 lines 12-26**);

Fig. 3 of Master illustrates a receiver apparatus PVR 4; includes **a user profile unit [30] for providing user preference data to the collecting unit**; (i.e. the PVR 4 is configured to receive viewer inputs [30] via the remote control 16); *reads on (col. 5 lines 35-37)*

However, Master is silent with *a personal channel controller for generating a personal channel and generating a personal channel; wherein the personal channel is for providing the preferred program listed in the EPG to the user*

In an analogous art directed toward a similar problem namely improving the results from *a user profile unit for providing user preference data to the collecting unit ; a personal channel controller for generating a personal channel and generating a personal channel; wherein the personal channel is for providing the preferred program listed in the EPG to the user*

Fig. 1 of Montie illustrates a receiver apparatus includes a **personal channel controller (i.e. a virtual channel module [15]) for generating a personal channel**, *reads on (Montie, page 5 lines 21-25)*;

**EPG module [14]** generates an on-screen overview programs stored in the memory [11] can be accessed by **a virtual channel module [15] for generating a personal channel** (i.e. a virtual channel) based on a personal program schedule that is composed by the schedule module [16] that meets “**generating an electronic program guide** for informing the user that the preferred program is outputted on **the personal**

**channel at the preferred duration based on the updated instance description data”** (see Montie, page 4, line 10-page 6 line 18). Finally, *Montie discloses a user’s personal channel as “virtual channel”; wherein the personal channel is for providing the preferred program listed in the EPG to the user; reads on (page 3 lines 23-33).*

At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the PDR with personal channel service of Master including EPG module as taught by Montie to generate EPG information for supporting the personal channel information.

**Regarding to claim 26.** the apparatus as recited in claim 25, Masters teaches the user preference data is updated in accordance with user history information (sub menu 42, 44 in view menu 40 of Fig. 4; **see Master, col. 8 lines 3- 30).**

**Regarding to claim 27.** the apparatus as recited in claim 25, Masters also teaches the user history information includes information of user action (*based on sub menu 42, 44 in view menu 40 of Fig. 4; user can Edit or Execute the viewing menu*) when the user reviews the broadcasting program in the EPG. (**See Master, col. 8 line 31-col. 9 line 13).**

**Regarding to claim 28:** the apparatus as recited in claim 25, Masters further teaches the content description data includes program information and group information. (*sub menu 44 contains channels and category group; see Master, Fig. 4 col. 8 lines 3- 30).*

**Regarding to claim 29.** the apparatus as recited in claim 25, Masters further teaches wherein the instance description data includes program location and service information (**see Fig. 3 col. 5 line 28 to col. 7 line 43**).

**Regarding to claim 30:** the apparatus as recited in claim 25, Montie also teaches “wherein the user preference data includes a user’s preferred day and time (*as user selective schedule*), genre, or title (*i.e. user profile*)”. (**see page 2 lines 4-23**)

3. Claims **4-5, 8-9, 13-14 and 17-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters, and Montie; in view of US Patent No. 7,212,730 (Hereinafter US’730) issued to Boston et al.

**Regarding to claim 4:** Masters discloses the method as recited in claim 2; but fails to teach wherein a genre of a program that occupies the longest duration among the programs.

In an analogous art directed toward a similar problem namely improving the results from a genre of a program. Boston, the same field endeavor, teaches wherein a genre of a program that occupies the longest duration among the programs outputted by the PDR in the preferred duration is selected as the preferred genre. (Genre field 430 is used to identify the types of programs the user enjoys watching; (**see col. 6 lines 20-38**); and Metadata 540 maintained for the program may include the program title 550, the length of program 565, the genre of the program 580. The metadata is searchable by the DVR in selecting a program that based on the user’s preferences; that user is likely to enjoy watching; (**see Boston, col. 6 lines 44-54 and Fig. 4** ).Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify a personal channel service on EPG of Masters and Montie with a metadata maintained for the length of a genre program as taught by Boston; in order to create a personal channel based on category's user.

Regarding to **claim 5**: Boston discloses the method as recited in claim 2, wherein the preferred program titles are selected based on the program duration outputted by the PDR, the EPG, and a frequency of program information exposure. (**Boston, Fig.19 col. 16 lines 19-62 and Fig. 25 col. 20 lines 36 to col. 21 line 29**).

**Regarding to claim 8**: same ground rejection of claim 4.

**Regarding to claim 9**: same ground rejection of claim 5.

**Regarding to claim 13**: same claim 4 ground rejection.

**Regarding to claim 14**: same claim 5 ground rejection.

**Regarding to claim 17**: same claim 4 ground rejection.

**Regarding to claim 18**: same claim 5 ground rejection.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-18, 25-30 have been considered but are moot in view of the new ground(s) of rejection.

Applicant respectfully states that: Masters and Montie do not disclose that the personal channel is for providing a user preferred program, which is determined based on the usage history, listed in the EPG to the user. (Remark; page 11) Examiner respectfully disagrees:

Montie explicitly teaches a virtual channel module as **a personal channel controller** for generating **a personal channel** is for providing a user preferred program which is determined based on the usage history, listed in the EPG to the user. (page. 3 lines 23-33)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN LUONG whose telephone number is (571)270-5091. The fax phone number is (571)270-6091. The examiner can normally be reached on Mon.-Thurs., 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALAN LUONG/  
Examiner, Art Unit 2427

/Scott Beliveau/  
Supervisory Patent Examiner, Art Unit 2427